CLAIMS:

1. A method of treatment comprising improving and/or normalizing lung function in a patient in need of said treatment, said method comprising administering an amount of uteroglobin to said patient sufficient to improve lung function relative to lung function in the absence of said treatment.

2. The method of claim 1 wherein said uteroglobin is recombinant human uteroglobin.

3. The method of claim 1 wherein said amount of uteroglobin is 10 ng/kg - 25 mg/kg.

4. A method of treatment comprising improving and/or normalizing pulmonary compliance in a patient in need of said treatment, said method comprising administering an amount of uteroglobin to said patient sufficient to improve and/or normalize pulmonary compliance relative to pulmonary compliance in the absence of said treatment.

5. The method of claim 4 wherein said patient suffers from reduced pulmonary compliance as a result of a pulmonary challenge or insult resulting from exposure to one or more substances selected from the group consisting of non-atmospheric gases, non-atmospheric ratios of atmospheric gases, inhaled chemicals, pollutant, irritants, inhaled pollens, allergens, particulate matter, and an airborne infectious agent.

6. The method of claim 4 wherein said uteroglobin is recombinant human uteroglobin.

7. The method of claim 4 wherein said amount of uteroglobin is 10 ng/kg - 25 mg/kg.

8. A method of treatment comprising improving blood oxygenation and/or normalizing blood pH in a patient in need of said treatment, said method comprising administering to said patient an amount of uteroglobin sufficient to improve blood oxygenation and/or normalize blood pH relative to blood oxygenation and/or blood pH in the absence of said treatment.

9 The method of claim 8 wherein said uteroglobin is recombinant human uteroglobin.

10 The method of claim 8 wherein said amount of uteroglobin is 10 ng/kg - 25 mg/kg

11. A composition comprising uteroglobin in an amount sufficient to improve and/or normalize lung function, and a pharmaceutically acceptable carrier or diluent.

12. The composition of claim 11 wherein said uteroglobin is recombinant human uteroglobin.

13. The composition of claim 11 wherein said amount of uteroglobin is 10 ng/kg - 25 mg/kg.

14. A composition comprising uteroglobin in an amount sufficient to improve and/or normalize pulmonary compliance, and a pharmaceutically acceptable carrier or diluent.

15. The composition of claim 14 wherein said uteroglobin is recombinant human uteroglobin.

16. The composition of claim 4 wherein said amount of uteroglobin is 10 ng/kg - 25 mg/kg.

17. A composition comprising uteroglobin in an amount sufficient to improve blood oxygenation and/or normalize blood pH, and a pharmaceutically acceptable carrier or diluent.

18. The method of claim 17 wherein said uteroglobin is recombinant human uteroglobin.

19. The method of claim 17 wherein said amount of uteroglobin is 10 ng/kg - 25 mg/kg

20. A method of treatment comprising increasing lymphocyte production *in vivo* in a patient in need of said treatment, said method comprising administering to said patient an amount of uteroglobin sufficient to increase lymphocyte production in said patient relative to lymphocyte production in the absence of said treatment.

21. The method of claim 20 wherein said uteroglobin is recombinant human uteroglobin.

22. The method of claim 20 wherein said amount of uteroglobin is 1ng/kg - 100 mg/kg.

23. The method of claim 20 wherein said lymphocytes are selected from the group consisting of effector lymphocytes and cytotoxic T cells.

24. The method of claim 20 wherein said effector lymphocytes are selected from the group consisting of helper T cells, plasma B cells, and memory B cells.

25. The method of claim 20 wherein said patient suffers from decreased lymphocyte production as a result of an autoimmune disease or allergy.

26. The method of claim 25 wherein said autoimmune disease is acquired immunodeficiency syndrome.

27. A method of treatment comprising increasing production of suppressor T cells in a patient in need of said treatment, said method comprising administering to said patient an amount of uteroglobin sufficient to increase production of suppressor T cells relative to suppressor T cell production in said patient in the absence of said treatment.

28. The method of claim 27 wherein said amount of uteroglobin is 1 ng/mg - 100 mg/kg.

29. The method of claim 27 wherein said uteroglobin is recombinant human uteroglobin.

30. A method of treatment comprising enhancing a lymphocyte-mediated response *in vivo* in a patient in need of said treatment, said method comprising administering to said patient an amount of uteroglobin sufficient to enhance said lymphocyte-mediated response relative to a response observed in the absence of said treatment.

31. The method of claim 30 wherein said amount of uteroglobin is 1 ng/mg - 100 mg/kg.

32. The method of claim 30 wherein said uteroglobin is recombinant human uteroglobin.

33. The method of claim 30 wherein said lymphocyte-mediated response results from administration of a vaccine.

34. The method of claim 33 wherein said vaccine is selected from the group consisting of B cell and T cell vaccines.

35. The method of claim 30 wherein said lymphocyte-mediated response results from administration of a tolerance-inducing treatment.

36. The method of claim 35 wherein said tolerance-inducing treatment is selected from the group consisting of oral tolerance and allergy shots.

37. A method of treatment comprising decreasing the production of polymorphonuclear leukocytes (PMN) in a patient in need of said treatment, said method comprising administering to said patient an amount of uteroglobin sufficient to decrease the production of PMN relative to PMN levels in the absence of said treatment.

38. The method of claim 37 wherein said amount of uteroglobin is 1 ng/mg - 100 mg/kg.

39. The method of claim 37 wherein said uteroglobin is recombinant human uteroglobin.

40. A composition comprising uteroglobin in an amount sufficient to increase lymphocyte production *in vivo*, and a pharmaceutically acceptable carrier or diluent.

41. The composition of claim 40 wherein said uteroglobin is recombinant human uteroglobin.

42. The composition of claim 40 wherein said amount of uteroglobin is 1ng/kg - 100 mg/kg.

43. A composition comprising uteroglobin in an amount effective to increase production of suppressor T cells, and a pharmaceutically acceptable carrier or diluent.

44 The composition of claim 43 wherein said amount of uteroglobin is 1 ng/mg - 100 mg/kg.

45. The composition of claim 43 wherein said uteroglobin is recombinant human uteroglobin.

46. A composition comprising uteroglobin in an amount effective to enhance a lymphocyte-mediated response *in vivo,* and a pharmaceutically acceptable carrier or diluent.

47. The composition of claim 46 wherein said amount of uteroglobin is 1 ng/mg - 100 mg/kg.

48. The composition of claim 46 wherein said uteroglobin is recombinant human uteroglobin.

49. A composition comprising uteroglobin in an amount effective to decrease production of polymorphonuclear leukocytes (PMN), and a pharmaceutically acceptable carrier or diluent.

50. The method of claim 49 wherein said amount of uteroglobin is 1 ng/mg - 100 mg/kg.

51. The method of claim 49 wherein said uteroglobin is recombinant human uteroglobin.

52. A method of treatment comprising inhibiting fibronectin-dependent cell adhesion to fibronectin in a patient in need of said treatment, said method comprising administering to said patient an amount of uteroglobin sufficient to inhibit fibronectin-dependent cell adhesion to fibronectin *in vivo.*

53. The method of claim 52 wherein said uteroglobin is recombinant human uteroglobin.

54. The method of claim 52 wherein said amount of uteroglobin is 25 ng/200 μl to 10 μg/200 μl.

55. A method of treatment comprising inhibiting cell adhesion to type III domains of fibronectin in a patient in need of said treatment, said method comprising administering to said patient an amount of uteroglobin sufficient to inhibit cell adhesion to type III domains of fibronectin.

55. The method of claim 55 wherein said uteroglobin is recombinant human uteroglobin.

56. The method of claim 55 wherein said amount of uteroglobin is 25 ng/200 µl to 10 µg/200 µl.

57. A method of treatment comprising inhibiting an interaction between fibronectin and cells dependent on fibronectin binding in a patient in need of said treatment, said method comprising administering to said patient an amount of uteroglobin sufficient to inhibit said interaction.

58. The method of claim 57 wherein said uteroglobin is recombinant human uteroglobin.

59. The method of claim 57 wherein said amount of uteroglobin is 25 ng/200 µl to 10 µg/200 µl.

60. The method of claim 57 wherein said cells dependent on fibronectin binding are selected from the group consisting of neural cells, muscle cells, hematopoietic cells, fibroblasts, neutrophils, eosinophils, basophils, macrophages, monocytes, lymphocytes, platelets, red blood cells, endothelial cells, stromal cells, dendritic cells, mast cells, and epithelial cells.

61. The method of claim 57 wherein said patient is suffering from a condition selected from the group consisting of the formation of adhesions following surgery, atheroschlerosis, thrombosis, heart disase, vasculitis, formation of scar tissue, restenosis, phlobitis, COPD, pulmonary hypertension, pulmonary fibrosis, pulmonary inflammation, bowel adhesions, bladder fibrosis and cystitis, fibrosis of the nasal passages, sinusitis, inflammation mediated by neutrophils, and fibrosis mediated by fibroblasts.

62. A method of treatment comprising inhibiting inflammatory cell and fibroblast migration on fibronectin already deposited *in vivo* in a patient in need of said treatment, said method comprising administering to said patient an amount of uteroglobin sufficient to inhibit fibronectin-dependent cell adhesion to fibronectin, thereby inhibiting inflammatory cell and fibroblast migration.

63. The method of claim 62 wherein said uteroglobin is recombinant human uteroglobin.

64. The method of claim 62 wherein said amount of uteroglobin is 25 ng/200 µl to 10 µg/200 µl.

65. The method of claim 62 wherein said inflammatory cell is selected from the group consisting of neutrophils, eosinophils, basophils, macrophages, monocytes, lymphocytes, platelets, red blood cells, dendritic cells, mast cells, and fibroblasts.

66. A method of treatment comprising inhibiting fibronectin polymerization, deposition, and/or cell adhesion *in vivo* in a patient in need of said treatment, said method comprising administering to said patient an amount of uteroglobin sufficient to bind to at least one type III domain of fibronectin, thereby inhibiting fibronectin polymerization, deposition, and/or cell adhesion.

67. The method of claim 66 wherein said uteroglobin is recombinant human uteroglobin.

68. The method of claim 66 wherein said amount of uteroglobin is 25 ng/200 µl to 10 µg/200 µl.

69. A method of treatment comprising inhibiting an interaction between a cell having a PLA_2 receptor and an extracellular matrix protein and/or a membrane bound protein comprising at least one fibronectin type III domain protein in a patient in need of said treatment, said method comprising administering to said patient an amount of uteroglobin sufficient to bind to said at least one type III domain(s), thereby inhibiting said interaction.

70. The method of claim 69 wherein said uteroglobin is recombinant human uteroglobin.

71. The method of claim 69 wherein said amount of uteroglobin is 25 ng/200 µl to 10 µg/200 µl.

72. The method of claim 69, wherein said extracellular matrix protein is selected from the group consisting of laminin, collagen, vitronectin, and fibrin.

73. The method of claim 69, wherein said membrane bound protein is selected from the group consisting of adhesion molecules, integrins, and receptors.

74. A composition comprising uteroglobin in an amount effective to inhibit fibronectin-dependent cell adhesion to fibronectin, and a pharmaceutically acceptable carrier or diluent.

75. The composition of claim 74 wherein said uteroglobin is recombinant human uteroglobin.

76. The composition of claim 74 wherein said amount of uteroglobin is 25 ng/200 µl to 10 µg/200 µl.

77. A composition comprising uteroglobin in an amount effective to inhibit an interaction between fibronectin and cells dependent on fibronectin binding, and a pharmaceutically acceptable carrier or diluent.

78. The composition of claim 77 wherein said uteroglobin is recombinant human uteroglobin.

79. The composition of claim 77 wherein said amount of uteroglobin is 25 ng/200 µl to 10 µg/200 µl.

80. A composition comprising uteroglobin in an amount effective to inhibit inflammatory cell and fibroblast migration on fibronectin already deposited *in vivo*, and a pharmaceutically effective carrier or diluent.

81. The composition of of claim 80 wherein said uteroglobin is recombinant human uteroglobin.

82. The composition of claim 80 wherein said amount of uteroglobin is 25 ng/200 µl to 10 µg/200 µl.

83. A composition comprising uteroglobin in an amount effective to inhibit fibronectin-dependent cell adhesion *in vivo*, and a pharmaceutically acceptable carrier or diluent.

84. The composition of claim 83 wherein said uteroglobin is recombinant human uteroglobin.

85. The composition of claim 83 wherein said amount of uteroglobin is 25 ng/200 µl to 10 µg/200 µl.

86. A composition comprising uteroglobin in an amount effective to inhibit an interaction between a cell having a PLA_2 receptor and an extracellular matrix protein and/or a membrane bound protein comprising at least one fibronectin type III domain protein, and a pharmaceutically acceptable carrier or diluent.

87. The composition of claim 86 wherein said uteroglobin is recombinant human uteroglobin.

88. The composition of claim 86, wherein said amount of uteroglobin is 25 ng/200 µl to 10 µg/200 µl.